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ORIGINAL ARTICLES:

Polynesia: Material Culture. **Buck.**

The Study of Polynesian Material Culture. *By Peter H. Buck, Professor of Anthropology, Yale University, and Director of the Bernice P. Bishop Museum, Honolulu.*

The scientific study of material culture has been somewhat neglected in favour of the less exacting subjects of social organization and religion. I use the term "less exacting" advisedly because the proper study of material culture involves the recording of the technical details by which objects are made. The technical details, in turn, cannot be clearly conveyed to the reader unless they are adequately illustrated with line drawings which show the various stages of the technique employed. An intelligent student with average skilled hands should be able to make a rough sampler from an illustrated description. An American friend of mine built a rough shack and thatched the roof with coconut leaves. When the two sides of the roof reached the ridgepole, he was puzzled as to how the chink between the two sides should be rendered rainproof. He fortunately had a book on the material culture of the Cook Islands. He consulted it and found out exactly how the coconut-leaf ridge sheet was plaited and pinned in position, and he carried out the technique with satisfactory results.

The study of technical processes in the field takes a good deal of time and patience, and the drawing of diagrams with the written description takes even more. Unless one becomes really interested in seeing how craftsmen have surmounted difficulties and solved problems, the study is somewhat tedious and it is small wonder that this phase of ethnology has been neglected. To add to his difficulties, the ethnologist often finds that there is no terminology in the literature to help him to describe some of the processes involved. However, the patient and industrious student reaps his reward after he has mastered the main principles of various techniques,

for he is enabled thereby to appreciate similarities and differences that would otherwise not be obvious. The techniques studied in one island group help to lessen work in other groups. By carefully studying the methods of plaiting and netting in New Zealand, I laid the groundwork for later work in Polynesia.

Though the main principles of such a technique as plaiting may be similar, there are a number of differences with regard to material, methods of preparation, and details such as commencing, joining, decoration, and finishing. A knowledge of material and technical details is of primary importance in helping to identify articles, the locality of which is in doubt or has been wrongly ascribed.

At a certain museum I was shown a tuft of white hair seized with fibre, credited to one of the Cook expeditions and ascribed to New Zealand. On examining the seizing with a lens, I was able to say definitely that it did not come from New Zealand. Why? The seizing was made with coconut husk fibre and coconuts did not grow in New Zealand. Furthermore, the technique of the seizing proved that the tuft had formed part of a *taume* breast ornament from Tahiti. In the museum at Berne, Switzerland, I was shown a folded textile in a case that formed part of the Webber collection and was attributed to Tonga. Through the glass I could see the strands of material were kept in position by spaced rows of a single-pair twine. Now the textiles of Samoa and Tonga are plaited in check and the single-pair twine is not used except in fish traps. I accordingly shook my head in negation as to the locality, much to the horror of the museum director, who seemed to regard my doubt as an aspersion on the veracity of Webber. I told him about technique, but that did not appear to cut much ice with an historical ethnologist. We took out the garment and unfolded it, probably for the first time since it had been put in the case. I glanced at my companion and saw that he realized as I did that the garment was a cedar bast cape from the north-west American coast. Webber, a native of Berne, was the artist with Cook's third expedition which visited both New Zealand and the north-west American coast. Webber had collected the cape on the north-west coast, and not in Tonga. I could recall many other instances where wrongly labelled Polynesian material has been correctly identified through a knowledge of comparative technology.

The field worker is happy when he can get his information direct from a man or woman skilled in a particular craft. The various materials, preparation, processes and terms can then be recorded in detail. I have

found it useful to not only procure completed articles, but to take samplers showing various important stages of the work in such things as mats and baskets. These help when the final line drawings are being made from rough field sketches and notes. They are also useful for demonstration purposes to students or to the rare ethnologist who may be interested. Some of the crafts have long disappeared, such as adze making. The technique of lashing the adzes to hafts has lingered on in some regions. The Samoan carpenters now use plane blades instead of stone adze heads, but they attach them to short hafts of ancient form with sennit braid lashed with the old technique. An adze lashing pattern that was used in the Society and Cook Islands is still known to an old man in Aitutaki. In Mangaia an old man continued to make ceremonial adzes for sale or as gifts until a few years ago. The lashing process was divided into two parts: an open decorative pattern and the fixation lashing. The old man taught me the decorative pattern, but the actual lashing technique that he used appeared very poor to me. On return from the field to Bishop Museum, I found that the lashing on our old ceremonial adzes was totally different and formed one of the most artistic patterns in Polynesia. It was evident, therefore, that the original lashing had been forgotten probably because none of the old lashed adzes had been left in Mangaia. With the knowledge of lashing technique that I had acquired, I was able to work out the lashing technique of this particular pattern, which is peculiar to the island of Mangaia.

Of course, it is easier to record a technique from direct observation in the field, but when a technique has been forgotten or has not been observed during an expedition, it is still possible to work out the technique from museum specimens. If there are a number of duplicates, I have no hesitation in taking the poorest specimen to pieces in order to see how it was made. When I made a field study of the material culture of Aitutaki, I saw the rough fans of coconut leaf being made. In these, the leaf midrib acts as a handle and the leaflets are fixed in pairs by nature. The fine fans with a separate wooden handle were not being made during my stay, and the result was that in my first study I illustrated the fine fans but did not say anything about their technique. I avoided the subject because I could not give field details that I did not have. The problem was how were the strips of coconut leaf attached to the tang of the wooden handle. The attached ends of the strip were concealed completely by the crossings of the strips, both back and front. I could guess, but guessing is not proof. In a recent

study, I unravelled an Aitutaki fan with a broken handle, and the technique was made as clear as if I had observed the process in the field. Commencing at the distal end, the leaf strips were placed in pairs against the side of the tang. The first pair was fixed by tying with a fine cord and then successive pairs were tied to the tang by spiral turns of the cord. It was very simple and obvious once the tang was revealed by unravelling the fan, but before that it was a technical problem. Furthermore, the unravelling of the fan revealed that the fans of central and western Polynesia are made with different techniques. Fans may seem unimportant, but the difference in technique illustrates the fact that considerable variation exists which in turn leads to the conclusion that a good deal of independent evolution has taken place in various parts of Polynesia. The basing of theories of diffusion on a general description of the artefacts compared is both unsatisfactory and unscientific. Because the fans of Aitutaki and Samoa are composed of coconut leaf strips tied to a wooden handle and plaited, a diffusionist might be satisfied that the fan spread from Samoa to Aitutaki or *vice versa*. To the technologist, however, the attachment of the strips to the handle, the treatment of the strips, the plaiting stroke, the finish and the shape are all different in the two areas. The only things in common are the coconut leaf strips, the wooden handle, and the function of the fan. Those three elements are spread throughout Oceania.

The analysis of technical processes reveals, however, that in addition to a variety distinct technique, there has been diffusion of the various techniques in certain limited areas. Thus the Samoan fan technique is present in Tonga and Fiji, so we may regard these three groups as forming a secondary culture area in the west. The Aitutaki fan technique is present throughout the Cook Islands (except Mangaia) and in the Society Islands. It is evident that there has been diffusion in fan technique between these two groups. A number of other techniques such as the inverted triangular adze are present in the Cook, Society and Austral Islands, so that they form a central secondary culture area. I have never seen an old fan from the Austral Islands, so I do not know whether or not the Aitutaki technique was present in that group. When I use the terms " Samoan technique " and " Aitutaki technique," I do not mean that the techniques originated in the islands named, but merely that my first studies were made on fans from those islands. It is probable that the technique used in both Samoa and Tonga was diffused from Fiji, and the technique used in the Cook Islands from the Society group.

The lack of an old fan from the Austral Islands brings me to an important point in the study of material culture. Not only have some of the techniques died out in various island groups as a result of acculturation, but most of the old artefacts that survived are now in museums and private collections spread all over the world. Field study in material culture must therefore be rounded off with museum study. It is impossible, however, for a student to afford the time and the money to visit all museums. It is not sufficient to make a survey of just the large museums, for I have found valuable specimens in small provincial museums that did not even know the locality, let alone the value of the few specimens they possessed. During a visit to Europe, I took just about 1,000 photographs with a Leica camera of Polynesian artefacts in English, Continental and private collections. These, with a large number of photos taken by Mr. K. P. Emory and Miss Margaret Titcomb, members of the Bishop Museum staff, have formed the basis of a comprehensive photograph catalogue of Polynesian artefacts that the Museum is building up. We have corresponded with various museums and obtained photographs of their rarer Polynesian artefacts. The photographs are classified in sections such as food, houses, clothing, etc., and each section is subdivided into smaller groups so that similar articles such as bowls, pounders, etc., will always be together. The photographs are numbered and cards similarly numbered contain details as to size, technique, history, etc. The name of the museum with the museum number of the artefact is also recorded on both photograph and card so that any photograph used in an article or publication may be properly acknowledged. The photograph catalogue is kept in drawers in steel cases that are regionally labelled, and so easily accessible. There are many rare and unique artefacts that Bishop Museum can never acquire, but so long as we can obtain a photograph and particulars for our photograph catalogue we are perfectly happy. We hope that by building up a comprehensive photograph catalogue we will lay the scientific foundations for a comparative study of Polynesian material culture.

Up to date our photograph catalogue has solved a number of problems and created others. As an example, I may mention the Mangaian fan which differs from those of the other islands in the Cook group. In 1933 I saw a fan in the Horniman Museum, Forest Hill, London, that was labelled Mangaia. There was no doubt as to the accuracy of the locality, for the handle was carved with the K-motif peculiar to Mangaia. Though the fan was beautifully made, it differed so materially in shape and details of

technique from the fans of the neighbouring islands that I wondered whether it was a freak or really represented the type made in Mangaia. In 1939 I found a similar fan in the Wesleyan University Museum, Middletown, Connecticut. The actual technique was identical, but the handle was not carved. Later in the same year I located another in the Peabody Museum, Salem, Massachusetts, also with an uncarved handle. It had found its way into their Fijian collection, but has been restored to its proper setting. This year, in looking over Edge-Partington's Ethnological Album of the Pacific Islands, I noted a sketch of a fan attributed to Tahiti, but resembling the Mangaian fan in shape. I immediately wrote to St. Augustin's College, Canterbury, England, where the fan was located. I duly received the photograph with the dimensions, and it proved to be the largest of the four. We now have four fans of identical shape and technique, which establishes the fact that the Horniman Museum fan is not a freak, but the type made in Mangaia. Such fans are no longer made. The shape and technique occur nowhere else in Oceania, so here we have another undoubted case of independent evolution in Mangaia.

Our photograph catalogue has proved invaluable as a reference index for identifying Polynesian material. If any museum or private collector in Australia or elsewhere desires to check up on any Polynesian material, Bishop Museum will be pleased to render assistance if a photograph is sent to us.

In this article I have stressed technology, but the study of material culture would be incomplete without describing how material objects have been developed by expert craftsmen and how they function in the culture of the people. The simple fan in which the coconut leaf midrib formed the handle was common to all who wished to use a fan for cooling purposes. The specialized fan with a wooden handle marked social distinction, and in central Polynesia a fan formed part of the regalia with which the high chief was ceremonially inducted into office. The development of technological processes has been stimulated both by the artistic feeling of craftsmen and by the functional value that the material objects had in the culture of the people, whether it was economic, social or religious.

PETER H. BUCK.

ustralia : Material Culture. **Wright.**

he Preservation of the Rock Engravings and Paintings of the Sydney District.

y H. J. Wright, President of the Anthropological Society of N.S.W., 1940.

Ever since Governor Phillip drew attention to the rock engravings on ort Jackson's shores in a despatch to Lord Sydney, dated May 15th, 1788, umerous writers have stressed the great scientific and historical value of ese engravings, and the need for the preservation of as many groups as ossible. In this respect the Anthropological Society has taken an active terest since its inception in 1928, and has been able to have many groups served as national relics. I do not deem it necessary to discuss such atters as the nature of these engravings, where they occur, the subjects nd the techniques employed, since most members are familiar with them. loreover, they are dealt with in a series of articles by Mr. F. D. McCarthy *The Australian Museum Magazine*, Vol. I, No. 12, and Vol. II, Nos. -2, 1939-40, which give an insight into their meaning and function. In is address I intend, therefore, to deal with the more pressing problem of eir preservation, which is, indeed, for many magnificent groups, a matter f great urgency.

It is convenient to deal with the subject according to the situation of he groups, which are as follows :

(*a*) Those in national reserves and in municipal parks.

(*b*) Those outside these areas.

I shall then deal with the attitude of responsible bodies—the various rusts, councils and government departments—and discuss such questions s the responsibility of the government, the public and scientific societies. inally, I shall deal with the recording and preservation of the various roups.

(*a*) Groups in National Reserves and Municipal Parks.

It is fortunate that a large number of engravings occur within the oundaries of our reserves. Mr. W. D. Campbell recorded 57 sites, com-rising a large number of groups in Kuring-gai Chase, and there are probably s many others within the Chase yet to be located. They include some of he finest examples known, and their preservation is of the utmost mportance both historically and for their scientific study. In an adjoining rea, known as the Muogamarra Fauna and Flora Reserve, and established y Mr. J. D. Tipper, there are about nine groups, which include several plendid pictorial compositions ; it is hoped that this reserve will be made

into a national one, if only to save these engravings from destruction. There are also several groups in the recently proclaimed Davidson National Park along the foreshores of Middle Harbour, but this inlet is relatively unexplored. There are groups on the Manly Water Reserve ; there is one in the Ball's Head Reserve and one in Longueville Park ; one in the reserve at La Perouse, and one each on the golf links on Bondi Heights and on Elanora. Finally, there are between six and twelve groups in National Park. It is interesting to note that the paucity of groups in this area can be explained by the fact that the cult was concentrated mainly north of Port Jackson, and the National Park is in a peripheral area. There is, however, a gap in the Illawarra suburbs on the distribution map of engravings.

It would have been expected that the above groups would be preserved, but such is not always the case. For example, in the Kuring-gai Chase three groups were destroyed during the construction of the Coal and Candle Creek Road, notwithstanding that attention had been drawn to their existence, and their destruction is inexcusable.

(*b*) Groups Outside National Parks.

When we turn to this series we find that a much more serious position exists. Campbell recorded 93 sites within the metropolitan area, and 24 in the Woy Woy district. In addition, there is a much larger number of groups in the Wollombi, Dural and Hawkesbury River areas and on Mangrove Mountain, not yet recorded. Only 15 groups out of a total of some hundreds have been made special reserves. A large number are on Crown land and on unimproved leaseholds, and it is hoped that the most important of these will also be reserved. Unfortunately, about 20 of this series are known to have been destroyed by road-building and sewerage operations. The expansion of house building has destroyed most of the groups on the shores of Port Jackson, in the Eastern Suburbs, Mosman and Manly especially, mainly because no effort was made to reserve them.

Causes of Damage and Destruction.

The effects of weathering agencies—windblown sand, rain water, fretting of rock—constitute a serious problem in the preservation of the rock engravings. Some of the groups described by Campbell have now become very faint and it is evident that they will disappear in a decade or so. Weathering factors affect the softer sandstones particularly, and figures

ch as a large culture-hero on Mangrove Mountain, a number of groups tween the Pacific Highway and Woy Woy and many others are rapidly coming more difficult to discern.

The expansion of homes in the outer suburbs of Sydney, with the cessary road-building and sewerage operations, form the most dangerous ctor in the destruction of many fine groups of engravings. Many house ilders in these districts destroy groups of engravings in the quarrying t of the rocks for foundation stone. This factor is particularly noticeable the parishes of Narrabeen and Broken Bay and in the area north of the awkesbury River, including Mangrove Mountain, Patonga and so on. hen a group is so endangered and the Society's attention has been drawn it, it is the custom to make representations to save the group if possible, d in this respect the Main Roads Board and the Lands Department ve been most helpful. The Australian Museum also has taken a leading rt in these appeals.

The public generally has an appalling disregard for these relics of the origines. Numerous carvings have been disfigured not only by hikers d picnickers, but also by people who go to some trouble to visit them. ildren of local residents do considerable damage, and their parents take action to deter them. One fine group near Beacon Hill is so distorted th added lines that the original figures are impossible to define, and the at Rocks group near Allambee Road is now being treated in a similar anner. In both instances this vandalism has accompanied the settlement hich has taken place within the last few years.

On the Berowra Road local residents have dragged quarried stone over large figure of a culture-hero some 24 ft. long, notwithstanding that the te is a reserve. The Whale-feast group in the Muogamarra Reserve is most covered with the cut-in initials and names of visitors. Numerous her instances may be given of similar vandalism, and it is one of the most rious problems to be faced in the preservation of aboriginal relics generally. he most promising method of combating it is to launch a campaign aimed enlightening the people of Sydney of the great interest and value of ese remarkable examples of primitive art, and to inculcate among them an titude of protection. This is particularly important among the residents districts where engravings occur, among school children, boy scouts and rl guides. It is the duty of all members of the Society to further this aim here possible. In this respect the work of the late Mr. Hornshaw and of r. Walton has been most valuable.

Responsibility of Councils and Government Departments.

I am pleased to be able to state that the Australian Museum, Lands Department and the Main Roads Board have done their utmost to preserve groups of engravings where possible. Representations made by this Society have resulted in a number of groups being reserved as national relics, and it is our aim to extend this principle as far as possible. It is, however, one thing to have a group reserved, but its subsequent protection is a much more difficult problem. When a group is reserved by the Government it becomes the responsibility of the trust, local shire or municipal council to protect it, but the latter bodies are apathetic and disinterested ; and unless they are able to make the various sites into attractions to their district they are usually unwilling to take any action. They are willing to put up road signs and make paths to a group to allow the vandals easier access, but they will not spend the small amount required to erect a fence. On Dobroyde Head one of the most remarkable representations of a kangaroo—it is 24 ft. long—is situated just below a lookout, from which a path runs across the carving to the beach, but the Manly Council has for some time ignored repeated appeals to fence off this figure, though quite recently I am pleased to record, they have promised to take action. Similarly, the Hornsby Shire Council has ignored requests to protect a group at North Maroota, and this is one of the finest sets of engravings known. Several sites reserved in the Warringah Shire's district remain unfenced, and no interest in their preservation is evinced by the Council.

The desire to exploit the interest value of these carvings is well demonstrated by the fact that maps issued by the National Park Trust and the Railways Department for hikers recorded the positions of a number of groups of aboriginal engravings, but no action was taken to protect them. As a result, hikers defaced so many of them that the Society and the Australian Museum requested the abovementioned bodies to remove the location of these engravings from their maps, and this request was acceded to.

Preservation of the Engravings.

The various causes of destruction of the engravings just outlined and the lack of interest on the part of municipal and shire councils make it apparent that it will be impossible to preserve a large number of groups both within and outside reserves, which are still in existence at the present time. Several practical measures have been proposed, but not tried out. One is the use of a liquid silica to harden the sandstone and so prevent weathering. It is probable, however, that such a treatment would harden

e sandstone to a depth of up to an inch or so only, and cause it to break the mass in small and large slabs, thus destroying the carvings. Another ggestion, put forward by Mr. C. C. Towle, is to re-cut the most important ures, making the punctures or grooves (as the case may be) much deeper carvings which are now faint because of weathering. The only objection this treatment is that the figure no longer remains truly aboriginal in ecution; the advantages to be gained, however, far outweigh this nsideration. Its adoption would result in the permanent preservation the subject as depicted by the aboriginal and would save many important ures; moreover, it would be necessary to re-cut only a limited number of oups. I suggest this matter should receive due attention by this Society.

After taking into consideration the various factors tending to destroy ese valuable relics of an age-old culture, your Council has arrived at the nclusion that the most urgent immediate problem is the publication of mplete and accurate records of all the groups not in Campbell's mono-aph. It is important to note, however, that unless this recording provides ı accurate picture of the groups, time and energy devoted to the work e wasted. Mr. McCarthy, of the Australian Museum, has obtained the sistance of the Bushwalkers Club, and a small committee has made cords of several groups in the Berowra district.

One member of this Society, Mr. Erickson, and a friend, are recording veral groups at Woodford and Springwood. Another member, Mr '. H. P. Kinsela, is recording all of the groups of engravings in National ark.

In July, a small group of members decided to record a series of groups. ne day of each week-end has been spent on this work by Messrs. E. H. 'right, F. L. S. Bell, H. Cocks, F. D. McCarthy and Miss E. Bramell, who ave made the following records:

(1) The group beside Allambee Road, which consists of two lines of culture-hero foot tracks and figures of fish and a wallaby.

(2) Groups at North Maroota consisting of a kangaroo hit with boomerangs and spear, three kangaroos in line, male and female culture-heroes, emu and scrub-turkey with their eggs, circles and tracks and other figures.

(3) Two groups near Hungry Trig. Station showing a lyre bird and other items of interest.

(4) A group on Cowan Point depicting numerous fish, emus, snake and goanna, man holding club, gigantic opossum and weapons.

(5) A group near McCarr's Trig. Station, Lambert Peninsula, showing an emu and culture-hero, weapons, fish and other items carved on tessellated rocks. There are approximately 58 figures in this area alone. A further group of about 30 figures is located in swamp lands to the west of this tessellated rocks area.
(6) A group between Peat's Ferry and Mooney Creek.
(7) Two small groups at Berowra Waters.
(8) Groups beside Topham Trig. Station depicting culture-heroes, man and woman.
(9) Culture-hero groups at Refuge Bay.
(10) A group near Tamarama.

A series of other groups are to be recorded when opportunity offers.

The Rock Paintings.

The preservation of the rock paintings is a different problem from that of the engravings. The sandstone formation of the Sydney district is honeycombed with numerous rock shelves ideal for cave art, and the aborigines took full advantage of this medium. At present about 90 groups of cave paintings are known in the Sydney district, about 50% of which are situated in valleys radiating out from Wollombi, but a much larger number exist. There is no doubt that many caves containing paintings have been destroyed in the building of Sydney and its suburbs, and it is regretted some of those on the foreshores of Port Jackson were not saved as permanent national relics. Several fine sites occur in the National Park and in the Kuring-gai Chase, but to date no response has been made to the Society's representations to have steel-wire screens erected across the front of these caves before vandals have defaced them. The Society is, however, persisting in its efforts to have this protective device erected.

The Blue Mountains Shire Council has preserved the well-known Red Hands Cave, near Glenbrook, in this way, and has set an example that should be followed throughout the State.

The great problem is to preserve the magnificent series of cave paintings in the Wollombi area, where vandals have already been at work. Until the Government has passed legislation by which all aboriginal relics in the State are declared national relics, and provides funds to erect the necessary protective screens, little can be done to prevent vandalism other than by disseminating propaganda among local residents to make every effort to protect paintings. Some of the sites are on Crown lands and others are

n private lands—in most cases the latter are protected by the owners of ne property, but those on Crown lands are at the mercy of vandals.

Fortunately, 36 of the groups of paintings have been recorded and ublished by R. H. Mathews, and his work in this respect is comparable in alue with that of W. O. Campbell on the engravings. Etheridge, Campbell nd E. H. Wright have also recorded a further 20 sites.

I am pleased to say that one of our members, Mr. W. H. P. Kinsela, as taken up this work, and he has made records of paintings in six caves. he work is slow and more difficult than with the engravings, and a grant f funds is essential to enable one or more workers to carry out a com-rehensive scheme to record all of the groups known to us.

Legislation.

In 1939 the then Premier, the Hon. B. S. B. Stevens, announced that he Government was considering legislation for the preservation of aboriginal elics. The enactment of such legislation would be of the utmost value in nabling the Society to further its campaign for this preservation. It would erve to unify the control of aboriginal relics and, we hope, lead to a more ctive interest on the part of the Government in their scientific investigation nd in the publication of adequate records of them.

In respect to the rock engravings and paintings, it is to be hoped that ll sites on Crown lands will be made permanent reserves ; further, where hey are situated on private lands that provision will be made to prevent he owners from destroying them.

It is probable that the provisions of such legislation could not be ffectively enforced by adequate policing, but the moral effect of defacement nd destruction of relics being made a punishable offence will exert a onsiderable influence upon vandals. Thus, although much illegal wild-lower picking goes on despite the Wildflowers Act, the general public now nows it is an offence, and one can now see perfect bush gardens along motor oads. The Fauna Protection Act has also been the means of saving species hat were doomed to extinction. Legislation to protect aboriginal relics vill acquaint the public with their value and will serve as the basis of a ampaign for their protection ; out of this movement might grow a respect or the aborigines themselves, and the need for this attitude among the eople of N.S.W. is too well known to our members for me to add anything n support.

In conclusion, I would stress the need for every member to use his or ner best endeavours towards the preservation of the relics of a culture which

are of inestimable value and of unique interest. It may be possible to interest your local Member, your alderman or the shire engineer. You may have some influence with your school, scout group or girl guide unit. Indeed, there are many avenues through which information could be disseminated and your cooperation is earnestly besought.

Through the courtesy of the Australian Museum, and also Mr. W. J. Walton, a number of slides of aboriginal carvings have been made available, and these will be shown immediately. Before closing, I would like to express my sincere appreciation of the valuable assistance given me by Mr. F. D. McCarthy in the preparation of this address.

H. J. WRIGHT.

Australia: Mythology. **Marlow.**

The Story of the Binibin: a legend of Torres Strait. *By K. J. Marlow, Saibai Island, via Thursday Island.*

There were four courageous souls who set off from Kagara Point at one end of Saibai Island with the idea of eventually crossing the narrow waters that separate that island from New Guinea. The two sisters Eriu and Bugid were accompanied by their brothers, Nima and Poipoi. The first halt was made at a place called Augur, where grew an old coconut palm. Here lived Adabad, and when Nima remarked that it seemed a pleasant place to rest, and that he would like to examine it further, Adabad appeared and promptly moved them on.

Next they came to Ganidauwanan, which place fitted in with their ideas of what a camping place should be, and, as the custom is to this day, the men rested while the women made a garden. After two or three days (?) they went on to their next camp, which was at Ubu. Now appeared the first split in the party. Bugid stated her case: "Always when we make a garden I have to clear the scrub first, but Eriu is given the clear places to plant. My task is the harder, so it is better that I go back."

The men did not resent this frank statement. Instead they took formal leave of her, and Bugid goes back out of the story with her coconut-shell water-container, back to live near the Wakemab.

So the other three pushed on to Serabilwong, where they again rested a while. Now the next place of call was an important one, for on this spot stands today the village of Saibai, but then, the three wanderers saw only one man, Melauwal, who lived in a shell (a hermit-crab ?—K.J.M.). At

ght of them Melauwal retired into his shell, but Nima stood at the door ıd spoke to him.

" Do you live here alone ? "

" No, I have one mate named Budia."

" Where is he ? "

" I never see him ; he is just a voice as he comes from Boigu."

Then Melauwal asked : " Where are you fellows going ? "

" We have come along to Saibai shore to find the closest point to ew Guinea, where we intend going."

" I cannot help you," commented the shell-dweller, " as I have no boat : other means of passage to take you there."

But Nima was prepared. " I have something in my basket to take ıe over the water."

Melauwal, his curiosity aroused, followed them to the beach. From is basket woven from palm-fronds Nima drew out the Binibin, a small ɔund shell. Astonished, he made the obvious comment : " That tiny ıell is not large enough to carry you over the water."

Nima replied : " It is sufficient," and cast it on to the water. Then riu stepped on to the Binibin, which marvellously increased in size to ccommodate her. Next Poipoi followed her, then Eriu, and for each fresh assenger the shell obligingly expanded to contain them all. Two pigeon's eathers were placed forward to act as a sail, and, all preparations complete, lima held out his hand and called on the South Wind. A fair wind arose nd off went the craft to cruise along the Daudai coast.

They sailed past Warrukuik River (Place of Turtles), Buiui (so named ecause of the big pig they saw there), past Sapuralkauwa (the island of ying-foxes), and so to Mabadauan Hill. On they went past Malukauwa sland (lit., " in the sea without "), and so to a shallow point where they ɔuld land. Here Eriu first left their strange boat, then Poipoi, and lastly lima. With each disembarkation the Binibin decreased till it returned ɔ its original size, when Nima put it back in his basket.

But on land there came a hint of a second defection. As they were ravelling to Mouatt village Nima suggested they would all do better to eturn to Saibai. The others would have none of this. They were eager ɔ travel on to the famous Fly River.

When the migrants reached the Oriamu district, however, Nima ltered his mind completely. He was now taken with the villagers there, ɔ much so that Eriu proposed he marry into that tribe. But the old

nostalgia could not be overcome in Nima. His mind was made up; he would go back to Saibai. On the other hand, the wanderlust was still aflame in Poipoi. He was determined to push on to the Fly River.

Thus the courageous three had come to the parting of the ways; Nima went back to Saibai by means of his miraculous Binibin; Poipoi set out for the Fly; and it was Eriu after all, who stayed by the banks of the Oriamu to marry with the New Guinea people.

The Saga of Poipoi.

Now Poipoi did reach the Fly River, and here he found things not to his liking, for the wild bush-men assailed him. Stoutly he fought and slew many, but more came to overthrow this rash intruder. Poipoi did what he could; he fought and killed until it was politic to run. Into the bush he fled, the Fly River men hot on his tracks. Pursuit was so close that he sought refuge in an ant-hill. When the enemy came to the nest, out of it waddled Poipoi metamorphosed into a pig!

This wonder astonished the savages, so they resolved to keep this pig and not to slay it, but rather to make it their god. So closely did they watch the pig that Poipoi had no chance at first to resume his original form. But at last their vigilance did relax and the hero was able to become his natural self and to make good his escape

K. J. Marlow.

[Notes.—I have endeavoured to keep as faithfully as possible to the original, while omitting some irrelevant details and condensing others. The story in the main is, I would venture to say, something of an allegory. Just as certain biblical scholars see in the story of Abraham a symbol of the wanderings of a tribe, rather than of an individual, so here possibly is an account, disguised, of some tribal movement from Saibai to Daudai. The early defection of Bugid, the moving on of the wanderers by Adabad, the return of Nima, the settling of Eriu, could all be personifications of large-scale happenings on a tribal march. So, too, the appendage of Poipoi's adventures may be a guess at the fate of a hardy remnant who persisted. Whatever the interpretation, the story is an old favourite with the Saibai natives. The elder who related it to me heard it when he was a boy, and assured me that the tale as he told it was just as he first heard it, and that none was permitted to alter or add in the telling.

The various names of people and places are still to be found as given to individuals, just as we have our Peters and Pauls and Georges and Marys.

Budia: Personification of the echo (?). Boigu, one of the most remote of the Torres Straits islands, is still regarded with some superstitious dread by inhabitants of other islands.

The Binibin: I am unable to identify this particular shell. Probably it was unique.

Most of the Papuan localities mentioned in the story are very close to Saibai, and can easily be found on a large scale map of the south coast. The Oriamu is close to Daru.

It is interesting to note some of the parallels in the story, both to mediæval hagiology and to biblical narrative, when the miraculous is introduced. Nima, who manages the navigational part of the journey, is no lover of the land.]

ustralia : Material Culture. Berndt.

ıe Bark-canoe of the Lower River Murray, South Australia.

By R. M. Berndt, on. Assistant in Ethnology, South Australian Museum.

Introduction.

In January of this year (1940) the author, accompanied by Mr. J. Vigley, spent some time in the native camp at Murray Bridge on the iver Murray, South Australia.

The material discussed in this paper was obtained by the writer during ıat period from two aboriginal informants, named Karloan (Albert) and hralrum (Mark Wilson). Karloan, who is seventy-five years of age now, is ıe last surviving fully-initiated native of the Manangki clan belonging to ıe Jaralde tribe.[1] Thralrum is seventy-one years of age and is also of the aralde, although belonging to the Lewurindjerar clan.

The Jaralde tribe was situated on and around the eastern banks of ake Alexandrina and Lake Albert, its territory extending northerly along he eastern side of the River Murray to about ten miles past Murray ridge.[2]

The photographs reproduced in the accompanying Plate A show um-trees (*Eucalyptus rostrata*) which bear traces of the handicraft f now extinct River Murray natives. The trees are in the Jaralde tribal ountry. They are only about two or three hundred yards from the native amp at Murray Bridge [Pomber'uk],[3] and are either on the river's banks r in the swamp or lagoon immediately alongside of the bank.

Basedow[4] mentions that there are numerous trees growing near the anks of the river which have had large sheets of bark removed years ago y the local natives for the making of canoes.[5]

Although today there are still many of these interesting specimens cattered here and there along the banks of the Lower River Murray, no

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[1] ['*Jarilde-kald*], the Jaralde tongue.

[2] A map showing the positions of the Manangki and Lewurindjerar clans is illustrated n N. B. Tindale's paper, "The Legend of Waijungari, Jaralde Tribe, Lake Alexandrina, outh Australia, and the Phonetic System Employed in its Transcription," *Rec. of Sth. ustr. Mus.*, Vol. V, No. 3, p. 262, 1935.

[3] Pomber'uk is the large cliff on the western banks of the river near the railway bridge.

[4] Basedow, H., *The Australian Aboriginal*, 160, Adelaide, 1925.

[5] According to the author's informant, Karloan, the bark-canoe trees illustrated in Plates A and B were cut by natives prior to European occupation of that region.

attempt has yet been made to preserve them or at the least to save a few of the best.

In not so many years hence, many will have disappeared. Even those illustrated here show proof of age. To add to their likelihood of disappearance one must consider the fact that they may be used for firewood[6] or destroyed during land clearing and reclamation operations.

Explanation of Plates.

Plate A, fig. (1) shows how an elongated oval patch of bark has been cut and detached from the tree-trunk for the purpose of constructing a native canoe. This tree is on the edge of the western river bank, surrounded with willows. Length of cut, 10 feet; width at centre, 4 feet; depth, 3 to 4 inches.

Plate A, fig. (2). A canoe-tree opposite the native encampment. It is almost at the river's edge, being surrounded by a reed swamp. It may only be reached by boat. Length of incisure, 18 feet; width at centre, 4 feet; depth not noted.

Plate B, fig. (1). This tree, on the river's western bank, is an excellent example, and is by far the best preserved of those illustrated here. It is the more interesting in having a notch (quarter way up, on the right-hand side of illustration) used by the native as a foothold whilst cutting the bark. On the right-hand side may be seen the piece recently hacked by a vandal from the interior of the oval. Length of incisure, 20 feet; width at centre, 4 feet; depth, 3 to 4 inches.

Plate B, fig. (2). A view of a canoe-tree as it would have appeared to the early aborigine, venturing down the river in his bark-canoe.

Except for the bark that was removed from the tree, these trees were never mutilated or cut down by the Jaralde natives. In fact, they were respected and protected.

Places covered by trees were held sacred by the natives of the Dieri tribe of north-eastern South Australia.[7] The larger ones were believed to be the remains of their fathers or ancestors metamorphozed. These trees

[6] An example of such vandalism occurred recently. When the author returned the following day to examine the tree (illustrated in Plate B, fig. (1)), he found that wood had been hacked from the interior of the original elongated oval patch bared by the removal of the bark for the canoe. This had occurred on the best preserved and largest of the trees.

[7] Gason, S., " The Dieyerie Tribe," in Woods, *Nat. Tribs. of Sth. Austr.*, 280, Adelaide, 1879.

THE BARK CANOE OF THE LOWER MURRAY RIVER.

Fig. 1.

Fig. 2.

THE BARK CANOE OF THE LOWER RIVER MURRAY.

Fig. 2.

Fig. 1.

re never cut down, as for such an act they would be punished for not otecting their ancestors.

This evidence was substantiated by Mr. T. Vogelsang,[8] who while in e Dieri country some years ago collected a legend about a certain tree. is account, which will be written conjointly, will be published on a later casion.

The Simple Bark-canoe and its Construction.

Dr. D. S. Davidson has made an important contribution to the subject Australian watercraft.[9] In his paper he has compiled and constructed distribution map of the simple bark-canoe. It is found only in western ctoria, south-eastern South Australia, and the Murray-Darling basin of w South Wales. In that type the ends are filled up with clay or mud. ere is no stitching or sewing of any description in the simple bark-canoe.

Smyth, quoting Taplin, in a footnote of his book,[10] states that the tives around Lake Alexandrina made canoes exactly like those used in ctoria. In Victoria, writes the same author,[11] the canoes are of bark of e mountain ash, the stringy-bark, the red-gum, blue-gum, the white gum the valleys, the Snowy River mahogany and that of other varieties of calypts. They are not less than seven feet six inches in length, and the gest about eighteen feet. The former will carry two persons, while the ter six or more. Smyth describes a canoe from Gippsland, south-eastern ctoria,[12] which had the ends fastened together with strong fibres. Others e noted from the Snowy River,[13] Pammumaroo, near Menindie (Menindee), the Darling River, New South Wales,[14] and the Lower Murray (in ctoria).[15]

Davidson,[16] mentions that bark-canoes which have their ends tied are tributed in the south-eastern part of Australia. They are known as d bark-canoes and vary from those known as the simple bark-canoe.

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[8] Berndt, R. M., and Vogelsang, T., " Notes on the Dieri Tribe of Sth. Aus.," *Trans. of y. Soc. of Sth. Aus.*, 63, (2), p. 167, 1939.
[9] Davidson, D. S., " The Chronology of Austr. Watercraft," *Jour. of Poly. Soc.*, 44, s. 173, 174, 175 and 176, pp. 79-80, 1935.
[10] Smyth, R. Brough, *Aborigines of Victoria*, Vol. I, 414, London, 1878.
[11] Smyth, R. Brough, *op. cit.*, Vol. I, lviii and 407, 1878.
[12] Smyth, R. Brough, *op. cit.*, Vol. I, 407, 1878.
[13] Smyth, quoting Howitt, *op. cit.*, Vol. I, 408-9.
[14] Smyth, quoting Howitt, *op. cit.*, Vol. I, 410.
[15] Smyth, *op. cit.*, Vol. I, 411-12.

Little mention is made in literature of the bark-canoe of the Lowe River Murray (South Australia). Basedow[17] has recorded and illustrate one he found on the banks of the Murray in the vicinity of Tailem Bend, an describes their occurrence in that region in his book.[18]

Ramsay Smith[19] states that canoes are found among the lake an river tribes and on parts of the coast in south-eastern South Australia A large one, twenty feet long, will hold seven or eight people, and can b made in a day.

Davidson[20] describes how a sheet of bark is stripped off a tree selecte for its shape so that the natural curves determine the contours of th canoe.

The following information was supplied by the author's informant Karloan.

The aborigines of the Jaralde tribe generally selected a tree with bend in it (as can be seen in the accompanying illustrations). The bar [*jorli*] must be free from notch or bough, and can only be cut during th cold season [*jalti*]. A piece of wood, shaped as a chisel at one end an named *turi*, was used in cutting out the required sheet of bark. Anothe piece of wood or stone was used in hammering the *turi* in order to mak the incision. When the shape had been cut on the gum-tree [*wiri*], a woode peg inserted in the cut at several places easily raised and detached th bark.

The sheet was then placed on the ground and trimmed into shape a reproduced in text-fig. 1*a* (from a drawing by Karloan). The sheet wa bent, while hot ashes were applied to its sides and placed in its interio to form the concave shape and to dry the sap from the bark. The edge were propped up all round (see text-fig. 1*b*, also from a drawing by Karloan while the bottom was kept more or less flat by the insertion, into th interior, of heavy stones. Pieces of wood were stretched across fron one side of the canoe to the other to keep it in position. The larger canoes made in the above described manner, had their ends filled up with mud o clay mixed with dry grass. One end, more pointed and elevated than th

[16] Davidson, *op. cit.*, p. 80.
[17] Basedow, H., "Evidence of Bark-Canoes and Food-carriers on the River Murray, *Man*, 63, 1914.
[18] Basedow, H., *The Australian Aboriginal*, 160, Adelaide, 1925.
[19] Smith, W. Ramsay, *In Southern Seas*, 256, London, 1924.
[20] Davidson, *op. cit.*, p. 79.

other, acted as the prow [*puti*]. The depth of the canoe was about six inches. It was left in that stage of construction for several days.

When the canoe was ready for the finishing touches, the supports and weights were removed and mud or clay smeared on the bottom of the interior.

The type of simple bark-canoe described here differs somewhat from Davidson's account,[21] in which he states that the bark is selected so that its natural curves will determine the contours of the canoe.

A smaller canoe was also made by the Jaralde, in the same manner, but being of thin bark the ends would be bound or woven with a strong fibre, made from rushes, and the apertures filled with mud or clay as are the larger canoes.

The Jaralde canoe varied in length from six to twenty feet, the width being three to four feet.

The finished canoe is illustrated in text-fig. 1*c*.

Upon the clay interior of the canoe a fire was sometimes kindled.

An example in the South Australian Museum, from Avoca Station, River Darling, New South Wales, is constructed from bark and called *mungo*. Towards the bow-end, on a bed of clay, a fire is made.

Smyth[22] tells that when women in Victoria were out fishing they placed stones in the canoe and kept a fire burning so that they could cook the fish as soon as caught.

The oar or pole used by the Jaralde was not flattened at the end, and was named *purn'kulth*. The canoe was propelled by a native standing near the stern, who poled with the *purn'kulth*. Smyth[23] mentions that the natives of Victoria propel their canoes either by the long-stick (*kow-wung* or *jen-dook*) or by a scoop-shaped paddle of bark. The canoe is named *juki*.[24]

The Canoe in Jaralde Ceremonies.

Singing and dancing by the Jaralde and visiting natives from the upper regions of the River Murray (South Australia) preceded initiation

[21] Davidson, *op. cit.*, p. 79.
[22] Smyth, *op. cit.*, Vol. I, lviii.
[23] Smyth, *op. cit.*, Vol. I, lviii.
[24] Myer, H. A. E., "Vocabulary of the Language Spoken by the Aborigines . . . Sth. Aust. (Encounter Bay and the Lake Alexandrina Area)," 66, Adelaide, 1843, gives *yuke*=a boat, and *yuke-matiñgg-auwe*=as the "captain of a boat" (probably meaning the one that propels the canoe).

ceremonies. In these songs were sung commemorating different events or material objects.[25] According to Karloan, some of the chants referred to the canoe.

Smyth,[26] when writing of the *Pedeku* dance of the Moorundi natives,[27] says that they painted their bodies with stripes of red-ochre only. In another dance, known as a " canoe-dance," their bodies were painted with white and red-ochre, and sticks were used to represent paddles (poles). The men stationed themselves in two lines, each having a stick across his back, which was held by the arms ; they then moved their feet alternately to the tune of a song composed for the ceremony. At a given signal all would bring their sticks to the front and hold them as they do paddles (poles), swaying themselves in regular time as if they were paddling in one of their light canoes.

It would appear by the reference, in Smyth's above description of a " canoe-dance," to the light canoe, that the Murundi natives had more than one type of canoe. This would correspond with the information supplied by Karloan, namely that the Jaralde used a large and heavy canoe, as well as a small and light one.

According to Karloan, natives of the Murundi clan belonging to the Ngaiawung tribe came down the river into the Jaralde tribal country for ceremonies, bringing with them opossum, kangaroo skins and kangaroo sinews and bones for barter.

The Canoe in Legend.

That the bark-canoe was used in dream or ancestral times [*'pekere*] is evident by the legend of Ngurunderi. In that legend we learn of the great ancestor Ngurunderi who chased the Murray cod [*pondi*] down the River Murray to Lake Alexandrina in a bark-canoe [*juki*]. Later it is told that Ngurunderi made camp on two great fixed sandhills at Mt. Misery [*Larlayayel*] and having no further use of his canoe stood on these sandhills

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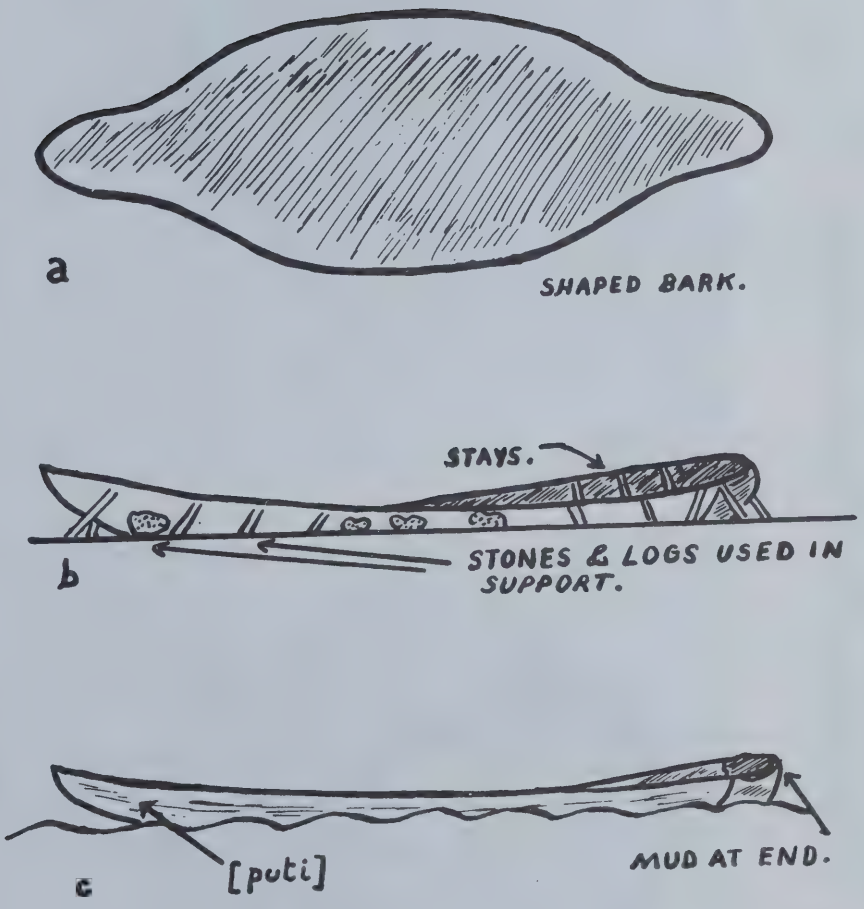
[25] Tindale, N. B., " Native Songs of the South-East of Sth. Aust.," *Trans. Roy. Soc. of Sth. Aus.*, Vol. 61, 107, 1937, narrates several songs from the Jaralde, Tangane and neighbouring tribes, showing the diversity of the subjects used.

[26] Smyth, *op. cit.*, Vol. I, 174-5.

[27] Tindale, N. B., " Notes on the Ngaiawung Tribe, Murray River, Sth. Aus.," *Sth. Aus. Naturalist*, Vol. 20, No. 1, 10-11, 1939, mentions that the Murundi (Moorundi) at Moorundie near Morgan, South Australia, are a clan belonging to the Ngaiawung or Aiawung tribe.

THE BARK CANOE OF THE LOWER RIVER MURRAY.



Text Figures a, b and c.

CULTURE CONTACT IN SOUTH AUSTRALIA.

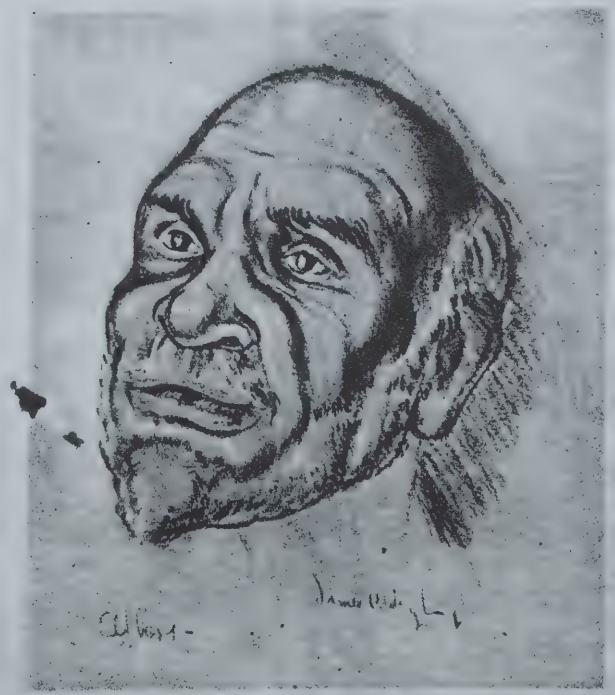


Fig. 1.

Fig. 2.

nd lifting it, placed the craft in the sky. It is today represented by the lilky-Way, which is called *juki*.[28]

Taplin,[29] in his account of the " Narrinyeri " tribes, of which one is the *Jarilde'kald*, gives a version of the Ngurunderi (Nurundere) legend, in which e tells that Nepelle [*Nepele*] lived at Rauwoke [*Rawukuŋ*] (near Point lacLeay Mission Station) and during the flood caused by Ngurunderi he as obliged to pull his canoe to the top of the hill, that is Point MacLeay, nd from thence it was transported to Wyirrewarre [*'waierewa*][30]; the ense part of the Milky-Way is said to be the canoe of Nepelle, floating in he heavens. Then its owner, by using the same means as Wyungare *'Waijungari*] ascended thither also.[31]

It is probable that Taplin's account of the origin of the Milky-Way is naccurate, or that he has obtained a different version. The author's nformant, Karloan, had no knowledge of this incident. He had always nown the Milky-Way as Ngurunderi's canoe.

Reed Rafts.

Reed rafts [*kandi*] or [*'munak'kuri*][32] constructed from yaccas [*ŋulai:i*] nd reeds [*ŋu:ri*] (or bulrushes [*prungi*] or reed-stems [*'prankaŋai*]) being ound together with fibre, made a satisfactory light craft for crossing a iver or small stretch of water.

Angas[33] gives an early account of rafts. He says that on Lake lexandrina the women went out upon rafts constructed of layers of reeds o the beds where fresh water mussels (*unio* species) abound. Eight or en females occupied one raft, and propelled it with a pole of about twenty eet in length. On this raft they would sit and cook their food, over a fire

[28] According to Tindale, N. B., " Legend of Waijungari, Jaralde Tribe," *Rec. of Sth. us. Mus.*, Vol. V, No. 3, 273, 1935, " the canoes of Ngurunderi still lie in the position in hich he abandoned them. They have been metamorphosed into Lalangengul, two great xed sandhills at Mt. Misery." The author's informant, Karloan, had not heard that lgurunderi possessed two canoes; this ancestor having used only one canoe while chasing ie *pondi* down the Murray.

[29] Taplin, G., " The Narrinyeri," in Woods, *Native Tribes of Sth. Aus.*, 57, 1879.

[30] [*'waierewa*], sometimes [*'waieru'war*]=in-sky.

[31] 'Waijungari, the younger brother of Nepele, threw a spear up towards the sky. The pear held fast, and the sky fell towards the earth. He then climbed up into the sky.—indale, *op. cit.*, 271.

[32] Tindale, N. B., and Mountford, C. P., " Results of the Excavation of Kongarati Cave ear Second Valley, Sth. Aust.," *Rec. of Sth. Aust. Mus.*, Vol. V, No. 4, 501, 1936, states that ie River Murray natives sometimes made rafts (*kandi*) of the reed stems of the plant *ŋu:ri*.

[33] Angas, G. F., *Savage Life . . . . . Australia and New Zealand*, Vol. 1, 90, 1847.

elevated upon wet seaweed and sand; every now and then they would dive off in search of the shells, and come up with their net-bags full.

An example in the South Australian Museum has a fire made on it.

Another, in the collection of the same Museum, is small and of triangular shape. It is called *kundi*, and is made of reeds and rushes. The inscription on the specimen states that rafts of this type were formally used on Lake Alexandrina and were sometimes of sufficiently large dimensions to carry six persons. The raft shown carried a single person. A poling stick was the only means of propulsion.

The Reed Raft in Legend.

This simple form of craft probably preceded the bark-canoe. In the great Jaralde epic, "The Ngurunderi Legend," it is told that the fleeing wives of this ancestral hero crossed Lake Albert, from Kurelpang to Nguliung[34] on the opposite bank, using the reed-raft which they hastily constructed.

Further reference to the raft and its importance in Jaralde culture will be discussed in a later paper on Burial Customs.

R. M. Berndt.

PROCEEDINGS OF SOCIETIES:

NEW SOUTH WALES:

Human Society, Culture, and War. *Summary of a lecture delivered before the Society by Miss E. Fenn Lusher on 17th September*, 1940.

To some war is a good institution, and to others it is evil, but only by examining its causes, conditions, and effects can we judge the value of war.

Usually there is an attacking and a defending community, each animated by a different motive. The attack is due to a desire for power, individual and communal, over the persons and possessions of the enemy. The defence is traceable to the sentiment of nationalism, that is to the identification of the individual with the culture of his community. Both attackers and defenders are using the institution of war as a means to attain some object in which they have an emotional interest, and the opposition given by the enemy to their desire rouses the instinct of pugnacity. The specific causes of defensive warfare are ideological and economic.

Wars caused by suspicion of magic are confined to primitive communities. Religion is a more fertile cause of fighting, although it is often confused with other motives such as desire for wealth or prestige. It is hard to separate the religious cause of war from that concerned with the conversion of opponents to a new social philosophy. Even in the present

[34] Nguliung=the place of the yaccas [*ŋulai:i*].

uropean struggle Christianity and Judaism are opposing the vaguely pagan doctrines of ermany, although the recognized cause of the conflict is the resistance of democracy to talitarianism.

Attempts to evolve a satisfactory economic system have been the cause of most wars, lthough some religious or political desire might be given as the reason. The Incas are an xample of a people acquiring wealth mainly through war.

The conduct of a war varies with the culture of a community, but in general an attacked mmunity may resist in open battle, or by small surprise attacks; it may hide, as the emang do; or it may capitulate. But training is necessary for fighting, and the civilian ust acquire the obedience, energy and single-mindedness of the fighter. He wears a istinguishing dress, undergoes group training, and is assured of supernatural aid, magical r religious. He learns a few rules of warfare, regarding treatment of prisoners and of roperty, for instance, as well as the control of his weapons. Often this training has a good ffect on his health and character, but it also saps initiative, makes clear thinking difficult, nd develops habits too violent for a peaceful community.

It is when the war is finished that its effects are best seen. On the whole they are not ood, consisting in mental and physical maladjustment to the needs of civilian life. On ie other hand the interruption to the cultural development of the community is in some spects stimulating, if the war has not been too severe. It may result in political and conomic improvements, and increased unity of purpose: but in civilian communities today ar is of so destructive a character that any cultural stimulus is overweighed by the loss of fe and wealth, and the setback to peacetime developments of such studies as medicine.

War, then, is not a good institution, and should be abolished; but it serves an individual eed for excitement and communal solidarity, as well as being sanctioned by generations hose heroes were warriors. War must be replaced by some institution which will be motionally as satisfying. The resemblance between the methods of religion and warfare in ontrolling the individual and making him a member of a group suggest that religion might e the substitute; both rely on mass meetings and ceremonials, the effect of which is eightened by the use of music, ritualized movement, colour, and the insistence on a few ain points, for their power . . . The obstacle is that religion is expressed by many creeds nd cults mutually independent or even hostile. There seems to be no hope of a universal eligion to give people the sense of individual vitality and exaltation, and the willingness to ooperate, that warfare provides. Moreover when people feeling strongly on a subject of ommon interest differ—as they must—dispute is sure to rouse a recognition of dissension the group.

The substitution of an institutionalized religion for war does not seem likely to take place. r to succeed if it does. The old traditions of settling argument by force are still too strong our minds. The change, then, cannot be imposed by external institutions. First the idea f war as the final answer to opposition must be recognized as useless, even as an aggravation f the trouble. As the disadvantages of war are more clearly seen, individual feeling against will grow stronger. This, combined with the growing acknowledgment of religious prin-iples dissociated from set creeds, and therefore universal, will lead to a gradual turning of nterest to other methods of attaining an object, and of gratifying self-esteem; but it may be

hundreds of years before this happens, and until then all the efforts of peace propaganda societies will not abolish war.

The Preservation of the Rock Engravings and Paintings of the Sydney District. *The presidential address delivered before the Society by Mr. H. J. Wright on 22nd October*, 1940.

The address, as delivered before the Society, has been published in full as an original article in this issue of MANKIND.

Annual Report of the Anthropological Society of N.S.W., 1940. *Summary of the report delivered at the annual meeting of the Society, 22nd October*, 1940.

The membership of the Society as at 30th September, 1940, was 113. There were seven new members elected during the year, two of whom were elected honorary members, viz. Dr. Raymond Firth and Dr. Margaret Mead.

Inclusive of the annual meeting, nine ordinary meetings were held during the year, at which the average attendance was only fair. The falling off in attendances must be attributed in large measure to war conditions.

During the year we sustained a severe loss in the death of our Patron, Sir J. H. P. Murray, who for so many years was an outstanding figure in the services of the Commonwealth in its administration of Papua. We are happy to record that Dr. Charles Anderson, Director of the Australian Museum, has kindly consented to fill the vacancy.

Excursions to Gosford and Manly were held on 21st April and 22nd June, respectively, and the Council desires to thank Messrs. P. Howe and W. J. Walton, who acted as guides. Arising from these outings it was decided to commence serious field work in regard to the plotting of a large number of groups of aboriginal rock carvings which have not previously been recorded. Since July a small party under the guidance of Mr. F. D. McCarthy has plotted four important groups, viz. east of Allambee Road in the Parish of Manly Cove, the Tessellated Rocks area and Lower Rocks area in the Kuring-gai Chase, and a fine group at North Maroota near Wiseman's Ferry. It should also be noted that Mr. W. H. P. Kinsela is preparing records of the groups in the National Park area.

The importance of this work cannot be too strongly emphasized, as many groups in the suburban areas around Sydney have been lost or are fast disappearing as a result of building encroachments and others as a result of time and weathering are becoming difficult to decipher. The whole aspect of this need for preservation is very fully dealt with in the presidential address.

It is hoped to publish the results of these surveys in MANKIND.

Your Council is pleased to record the active cooperation of the Kuring-gai Chase Trust and the N.S.W. Federation of Bush Walking Clubs in locating and preserving rock carvings within the Chase and in other areas.

Through the efforts of your Council the Department of Lands has been good enough to reserve from sale the area east of Allambee Road with a view to preserving the rock carvings situated thereon. Other areas are before the Department for consideration, and the help of municipal councils has also been sought. An appeal is made to members to do their utmost to have aboriginal relics in other districts and areas adequately protected.

We are pleased to record that members continue to make use of the library, which is on display at the monthly meetings, but we regret that due to the lack of funds it has not been possible to purchase additions.

We are also pleased to record that Miss A. D. M. Busby has presented a copy of "Experiments in Civilization", by Dr. Ian Hogbin, Mr. E. H. Wright, "Ethnological Notes on the Aboriginal Tribes of N.S.W. and Victoria", by R. H. Mathews, and that the Historical Society has donated a number of volumes of the "Science of Man". These gifts are appreciated and form welcome additions to the library.

Needless to say, it is hoped that other members will continue the good work either in the form of donations in cash or in gifts of books.

We have further to report the receipt of a number of journals in exchange for copies of MANKIND.

The Australian Anthropological Association. Proposals to hold the biennial conference in Adelaide this year have not yet materialized, owing to the postponement of the congress of the Australian and New Zealand Association for the Advancement of Science. It is still hoped this may be possible before the functions of this body are transferred to Sydney, in accordance with the Constitution, in August, 1941. We wish the Adelaide Council of Management every success in their efforts to promote this important gathering.

It should be noted that the Association has made an application to the Carnegie Corporation for a grant in aid of the publication of MANKIND and this is under consideration, the results of which should come to hand at an early date.

"*Mankind.*" The Society's journal MANKIND (Vol. 2, No. 8) was duly published and distributed in May of this year, and Vol. 2, No. 9, which has been delayed as a result of paper restrictions, is in course of preparation for issue next month.

Application had to be made for paper in view of war restrictions, but an application for exemption was also made in view of this journal being of scientific value and its appearance coming only twice a year. The Department, however, suggested ways and means of economizing in size, weight and type used, and these will receive the attention of the Editorial Committee.

We are pleased to record the outstanding work accomplished by one of our members, Dr. Phyllis Kaberry, in New Guinea, in social anthropology, for the Australian National Research Council. As previously referred to in this report, we were privileged to hear Dr. Kaberry's lecture on her return.

We are glad to hear that Miss Wedgwood, who has been very ill, is expected back in Sydney in December.

During the year our secretary, Mr. C. C. Towle, tendered his resignation, which was received with sincere regret. Mr. Towle's efforts on behalf of the Society have been of immense value, and contributed greatly to the successes which have been achieved.

The vacancy was filled by Mr. E. H. Wright, who has carried on these duties for the past four months.

Members are specially asked to use their best endeavours to secure new members and foster the work of the Society during the war. There is a very real scientific value in this work, and, in addition, it offers mental relaxation much needed in these days of strain and anxiety.

The Income and Expenditure Account showed a credit balance at the end of the year of £41 10s. 8d.

The financial position, we believe, may be regarded as satisfactory. Outstanding subscriptions amounting to £7 have been taken into the accounts this year.

In conclusion, we feel that despite the conditions brought about by the war, the Society has carried on successfully, and with the loyal assistance of members and their active support there is every reason to believe it will continue to function satisfactorily.

The Pax Brittanica in East Africa. *Summary of a lecture delivered before the Society by Dr. W. E. H. Stanner on 18th June,* 1940.

(It is hoped to publish a summary of this lecture in a later issue of the Journal.)

Culture Contact in a Country Town. *Summary of a lecture delivered before the Society by Mrs. C. Tennant-Kelly on 16th July,* 1940.

(It is hoped to publish a summary of this lecture in a later issue of the Journal.)

Men, Women and Yams. *Summary of a lecture delivered before the Society by Dr. Phyllis Kaberry on 8th August,* 1940.

One of the most important features of the Kalabu culture is the yam cult, and a study of this alone would throw much light on the kinship system, local organization, art, attitudes towards ownership and sex, economic values and the source of political authority.

Kalabu is situated in the foothills of the Torricelli Range in the Sepik District of New Guinea. It has been under government control since 1937, but much of the old culture is still intact. There are about thirty hamlets in the village, and the patrilineal clans and their offshoots tend to be localized. Taros, sago, bananas, sugar-cane, tobacco and greens are grown, but the most important crop is the yam, of which there are many varieties. The men grow most of these, and the women have nothing to do with the large varieties.

Planting begins about August and special gardens, taboo to the women, are cleared for the large yams, under the leadership of the clan elders, who observe food and sex taboos and perform most of the magic. Women help in the taro gardens and attend to most of the planting, weeding and harvesting. About April the large yams are harvested, decorated with masks, male ornaments and valuables, flowers and leaves, and are paraded through the village and displayed in the titular owner's hamlet. The yams are believed to be incarnated by spirits, and are also associated with the spirits of the dead and the carvings in the men's ceremonial house or *house-tamberan.*

There is much rivalry in the growing of yams, and some of them are exchanged between ceremonial trade partners each year, to the accompaniment of much boasting, arguments and sometimes fighting. The yam cult with its feasts, displays and exchanges is an important part of the Kalabu life, and is intimately associated with its art, with skill in gardening, self-discipline, initiative and male authority and prestige.

SOUTH AUSTRALIA:

Some Notes on a Language of Melanesia. *Summary of an address delivered before the Society on Monday, 28th October,* 1940, *by Rev. A. Stanley Webb.*

The lecturer stated it was considered essential that a missionary should have some knowledge of the native language before entering upon responsible work, and that he should try to become proficient in at least one of the many dialects which he was likely to encounter in his work.

The Melanesian Mission had almost by accident adopted Mota as its *lingua franca* by reason of the fact that natives of the Banks Islands (and especially of the island of Mota) so largely outnumbered those of other islands in the head school of the Mission in its early days. Most of the early translational work was done in the Mota language and subsequent translations into other languages were largely dependent upon the work done by Mota-speaking natives.

The island of Aoba in the New Hebrides presented the missionary with many dialects to some extent interdependent, although in the Merabes section (Ndui Ndui), there appeared to be quite a distinct language. This Merabes language was almost harsh in pronunciation compared with the speech of the Meracula who inhabited the remaining two-thirds of Aoba. Bishop Patterson was the first to make notes on the language of Aoba, but in 1871 Rev. Chas. Bice lived for a short period on the island and definite translational work was begun soon afterwards.

Mr. Bice endeavoured to make his translations useful and attractive throughout several districts by picking and using words from each of these districts. To simplify the written language, letters of the English alphabet not used by the people of Aoba were used to signify sounds which would otherwise have required the grouping of a number of consonants for their interpretation such as " Q " is equivalent to " Nggmbw " and the word for a young woman is written " taqulugu " instead of " tanggmbwulugu."

From the native point of view this was most desirable, though some white men have disputed the wisdom of the arrangement. It must, however, be remembered that the purpose of the Mission was to provide the natives with a written language which they could quickly learn to read—and those groups of consonants would have been rather terrifying to the reader of a " first primer ".

The natives generally are quick to learn and speak a language, and the lecturer knew one boy who spoke English and French well besides knowing Mota and most of the dialects of Aoba.

The language of Aoba (called by Dr. Codrington Opa) is written up fairly fully in " The Melanesian Languages ", for which Dr. Codrington earned well merited praise.

A View of the Worora Language. *Summary of an address delivered before the Society on 24th February, 1941, by Rev. J. R. B. Love, M.A.*

The Worora language is spoken by a tribe whose range at the present day is from north of the Prince Regent River to the mouth of Collier Bay, Western Australia, and extending about 25 miles inland. North of this tribe are the Wunambal, to the east the Ungarinjin. The tribes are distinguishable only by language, they intermarry at the present time, and each man can speak more than one language.

In Worora there are no sibilants and no fricatives ; initial *ng* is present, but the interdental *t* is absent, being found, however, among the Wunambal immediately to the north. There is confusion in the minds of recorders regarding the propriety of writing the language

with either the voiced or breathed consonants: *b-p*, *t-d*, *j-k*, between which there is no clear distinction in Worora.

If the language is written entirely with the vowel consonants it becomes too harsh, and therefore the breathed consonants have been preferred.

Euphonic elision of final sounds often occurs (*Andjol'kuru*, *Wordu'nguru*) and there may also be an insertion of a vowel (*u*) between words (for example *kaingg-u-nanja*).

Worora is a highly inflected language. The outstanding characteristics, however, are the presence of four grammatical genders and pronominal inflexions of the verb. The verb is formidable, for each has over a thousand forms.

The lecturer gave a sample of Worora text, outlining the story of Wondjina, an ancestral being who brought about a flood to revenge the mishap perpetrated on the owl, whose feathers were plucked out by children. Wondjina caused a flood of water to issue from his body to overwhelm mankind after sending various birds and reptiles as messengers and spies to observe the people who had injured the owl. This water, in the form of a flood, swamped the lowlands. All people were drowned excepting two children who clung to the fur of a wallaby and were carried to high ground.

This story was told to children by men and often by the old women. Great care was taken to ensure the correct sequence in telling the sending of the various birds [dollar bird, goose, bee-eater, and storm-bird (channel-billed cuckoo)] as messengers.

REVIEW

Mangarevan Images. *By Peter H. Buck (Te Rangi Hiroa). Ethnologia Cranmorensis. London (?), 1939 (?).*

This article by Dr. Buck, the leading authority on the material culture of Polynesia, has all the intriguing qualities of a modern mystery story.

We learn first of the discovery of six wooden images in such widely scattered places as London, Rome, Braine-le-Comte, St. Germaine and La Rochelle. Each one of these images bore characteristics which marked it as the product of a Mangarevan craftsman.

We next learn of the discovery of an old letter sent from Mangareva in 1836 which lists six wooden images which had been sent to Europe from the Pacific in that year. By comparing the images found in the various European museums with those listed in the old letter, Dr. Buck definitely identified five of them as belonging to that original single shipment made from Mangareva in 1836.

The article clears up a doubt concerning the locality of a so-termed "Tahitian" image in the British Museum and also provides, with its many fine illustrations, a key to Mangarevan images. It is to be hoped that readers of this article or this review will take advantage of the opportunity so afforded them by Dr. Buck to diagnose the locality of any doubtful Polynesian material by sending to him at the Bishop Museum, Honolulu, any photographs of material concerning the locality of which they may have doubts.

F. L. S. BELL.

NOTES, NEWS AND CORRESPONDENCE

Culture Contact in South Australia.

It is perhaps too late now to demonstrate the ability of the southern aborigine of the Lower River Murray to adapt himself to our culture.

By adaptation, I mean ability to successfully carry out many of our everyday tasks, such as those constituting manual labour rather than mental. This is not to say that he is devoid of mental ability, but that he more easily fits in to such manual work as shearing, farm-work, fishing and other such work.

Regarding the mental ability of the Aborigines, one may take for example the case of Mark Wilson (Thralrum) (see Plate D, Fig. 2) and David Unaipon, both Jaralde natives, who have taken their place in the religious life of our community (Adelaide).[1]

Professor Elkin states,[2] that an examination of the aborigines in their own culture shows that they can be educated to take an intelligent place in a complex social, economic or religious life, and that they can adapt themselves to changes which they accept and make in their own environment. But so far they have shown little power to adapt themselves to our culture.

This is alas true, and our attempts to help them have been unsuccessful, and only resulted in a "clash contact". Professor Elkin further relates,[3] that with the exception of a few thoughtful natives, the majority are attracted to the externals of our civilization and consequently to their own doom.

In the case of the Jaralde native, it must be remembered that he has for over a hundred years been in contact with the European, and for nearly that period under the influence of the missionary.

Today there are hardly any full-bloods left, and their culture has become extinct. This is the definite result of our efforts to help them. Unfortunately such efforts were put forward by individuals totally lacking an understanding of the native outlook, and his culture.

However, there are still several elders left. These men, thoughtful, efficient in the work they undertake, reliable, and friendly to all, still strive against heavy odds, to keep their little community together. Such a man was Karloan, my chief informant at Murray Bridge.

The native camp is situated quite near the township and is on the river's bank. It has a Europeanized appearance, as some of the houses have been constructed from cast-off timber from the town.

Native huts, made from bagging, kerosene tins and sundry other pieces of timber and iron, have sprung up here and there to shelter a community of some thirty people. They comprise two full castes, several half-castes and the others quarter- and one-eighth caste, with one white man who is living with a half-caste woman.

The question of food is of importance to these people. Their old hunting grounds have been taken over and cultivated. The game once so plenteous has long since disappeared from the green pastures of the river's banks. The bird-life is no longer to be seen. The hunter's eye is dimmed, his arm has lost its old accustomed power. Yet with the indomitable strength of courage, which characterizes the southern aborigine,

[1] *The A.F.A. Missionary and Educational Review for* 1939, Adelaide, pp. 14 and 18.

[2] Elkin, A. P., "Native Education, with Special Reference to the Australian Aborigines," *Oceania*, Vol. VII, No. 4, p. 496. 1937.

[3] Elkin, A. P., *op. cit.*, p. 472, 1937.

he has endeavoured to adjust himself to a new life. It has not been in vain, in some cases, for today he is able to take his place in our everyday duties. My friend Thralrum, a cultured man, had done shearing in many parts of South Australia; Karloan (see Plate D, Fig. 1) had also been a shearer, but now, at seventy-five years of age, he spends most of his time fishing. His son Clement (a quarter-caste) was interested in mechanics, sometimes being employed in such work.

Would we, if faced with such a social upheaval, have triumphed over such almost impossible odds?

Apart from their government ration and allowance, they often have good catches of Murray cod, perch, callop and other fish, which supplement their otherwise somewhat monotonous diet. Bread is the principal food, and in most cases the native women still make the flat damper of aboriginal days. Its importance is observed in the following episode:

One evening while talking in one of the huts, I heard a mother telling her little child a European nursery tale in this manner:

"One little pig went to market,
One little pig stayed home,
One little pig had *bread*,
The other little pig had none."

Karloan's cottage is the largest in this small community, being built by him with the help of his son. It faces the river, and contains three rooms, of which the centre one is the main living room. Through the kitchen-garden, with vegetable plot and almond tree, one steps upon a narrow limestone terrace into the house. A large tin-lined fireplace dominates the central position, while opposite a home-made table is placed, near a couch. Dresser, kitchen safe, crockery and such accessories, with two complicated chairs constructed from sections of a large pipe, complete the room's furnishing. From each side of this room open bedrooms, th one on the left for the women and childre and the other for the male occupants.

Finally a word may be said on the native appreciation of his environment.

At eventide there is no place mo delightful than the Murray. The bir returning to nest, the gentle rustle of th willow and native gum, the ripple of th river, all combine to bring a peace of min that is really something almost etherea The native who loved nature; who treate it as a part of himself, was in tune with h surroundings. The euphonic sound of th bird thrilled him through and through How far have we become dissociated fro nature? How much did the native mou the passing of the old days?

R. M. BERNDT

Appeal to Carnegie Corporation of Ne York.

In response to the appeal made to th Carnegie Corporation of New York December 1939, the following communicati was received on the 13th February, 1941:

New York,
November 21, 1940.

Dear Mr. Leask,

Your proposal of December 5, 1939, to support of the Journal of the Associatio MANKIND, came to the attention of th Board of Trustees of the Corporation November 19.

After consideration of the proposal relation to the current programme of th Corporation, the Board instructed me notify you that it does not see its way cle to take favourable action.

This action on the part of the Truste was based upon the facts of reduced Corpor tion income and a decision to lay aside considerable part of the available income meet contingencies arising from prese emergency conditions.

Sincerely yours,
(Sgd.) ROBERT M. LESTER,
Secretary.